# SASKATCHEWAN HEALTH RESEARCH BOARD

## ANNUAL REPORT

Period ending March 31, 1986

# —Saskatchewan Health Research Board—

#5 — 3002 Louise Street
Saskatoon, Saskatchewan
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April 1987

The Hon. George McLeod
Minister of Health
Legislative Building
REGINA, SK
S4S 0B3

Sir:

I beg to present herewith for your consideration the Annual Report of the Saskatchewan Health Research Board for the fiscal year ending March 31, 1986.

Respectfully submitted

D. D. Johnson

Dr. D. D. Johnson
Chairman

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## 1. CHAIRMAN'S STATEMENT

### HEALTH RESEARCH IN SASKATCHEWAN: AN OVERVIEW

The Saskatchewan Health Research Board (SHRB) concluded its seventh year of operation in 1985-86. The major concern of the Board during the year was to reassess its programs and priorities, and to consult with the research community in order to prepare for essential changes and improvements.

In May 1985 the Board released a Discussion Paper which reviewed historical programs and priorities, and enunciated a number of alternatives for the future. During the Fall of 1985 the Board met with a wide range of health research constituents to obtain their views on program development. Out of this process emerged a consensus that the Board could no longer attempt to develop every aspect of research training and practice in light of its thoroughly inadequate financial resources. Accordingly, the Board made two key decisions.

First, the Board determined that it ought not to continue to provide programs which essentially duplicated or strongly overlapped with those offered by the universities and/or other granting agencies. The major casualty of this decision was the Training Fellowship program, which provided scholarships for full-time graduate students in the health sciences. The program was offered for the last time during 1985-86. Without an explicit mandate to fund significant numbers of health science graduate students, and the money to do so, the Board was advised with near unanimity that it could better use its resources in other areas.

Second, the Board concluded that the province needed a mechanism able to assist in the development of multidisciplinary, larger scale research efforts and groups. Health research has become complex, and new advances are likely to result from the consideration of problems from wide-ranging perspectives. There has been a growing tendency for health research to be organized into teams, groups, and institutes. Saskatchewan has, for various reasons, lagged behind in such developments, and both the research community and the Board believe that concentrating significant resources into specific areas may yield unprecedented scientific payoffs.

In assessing the Board's accomplishments and capacities after seven years of operation, one is struck by two conflicting situations. On the one hand, the Board's programs are even more crucial to the vitality of Saskatchewan's health research environment than in previous years. There is a growing and damaging trend at the national level to freeze or even reduce scientific research funding in general, and health research funding in particular. The Medical Research Council of Canada (MRC) has seen its overall budget reduced by 2% and frozen for the next five years, though a matching grant program theoretically permits some increase. In its recent competition the MRC funded only 70 of 639 new grant applications, and 17 of 190 equipment submissions.

The Board's Establishment Grant program for new investigators, in light of this alarming situation, has become even more essential, and in some cases has been instrumental in the province being able to attract high quality new researchers from other jurisdictions. It is accurate to say that the Establishment Grant program accounts for a very significant portion of the new and vigorous research activity taking place in Saskatchewan. Moreover, in light of cutbacks at national and federal agencies, SHRB Establishment Grants may provide the only real opportunity for new scientists to get their careers off to a promising beginning.

Similarly, the Research Fellowship program has proved to be a major instrument of attracting promising young investigators to the province. The program provides salary support to researchers to enable them to obtain additional training and inxiepndent research experience following the achievement of a doctoral degree. Again, the overall environment in funding agencies and in the universities illuminates the importance of this program. A vital health research environment demands an influx of new, young investigators trained in the latest techniques and possessing the energy to contribute to and even reshape local projects and objectives. People with recently acquired doctoral degrees have in the short history of the Board come from elsewhere in Canada and four continents to work with increasing independence and skill in Saskatchewan. History has shown that many Research Fellows will establish careers in the province after their postdoctoral experience should positions become available. Hence they are not only extremely productive during their fellowship period, but they are also inclined to remaining here as they become familiar with the local environment. As there are few permanent positions available annually in the universities given existing budget circumstances and demographics, the Research Fellowship program is a key factor in recruiting "new blood" into the system, and in providing additional training and experience pending the availability of permanent positions.

Opportunities for social science health research in Canada are not widespread, and the Board's Socio-Health Research Grant program attempts to alleviate the dearth of funding in this area. Only a small part of the budget of the Social Sciences and Humanities Research Council (SSHRC), a federal agency, is able to be devoted to health research. The federal agency within Health and Welfare Canada responsible for socio-health research--the National Health Research & Development Program (NHRDP)--has a budget only 10% of the size of the MRC, and a good portion is devoted to clinical trials and other activities more accurately categorized as biomedical. The result is that the socio-health research community is particularly underdeveloped, here and elsewhere; furthermore, there are fewer temporary positions in social science fields than in biomedical fields in the universities allowing new investigators to get started, if impermanently, on their careers. Accordingly the Board now holds unrestricted socio-health research competitions for Saskatchewan investigators. The Board is pleased to note that the quality of submissions has risen over the years. As socio-health research is vital to the effective and efficient deployment of health care dollars,

the program deserves added resources.

Balanced against these accomplishments, without which the Saskatchewan health research situation would be even more grave, are the realities of the overall research infrastructure and the inability of the Board to alter our increasingly disadvantaged position in the Canadian and international context. Quite simply, the Board cannot bring about a new level of health research activity and excellence with a budget of $1 million per year. The Health Research Act gives the Board a mandate as broad as any agency in Canada. We have at various stages stretched our dollars thinly in an attempt to address the mandate literally; focussed our resources on key programs in recognition that we cannot be all things to all people given too little money; and implemented new programs in response to emerging needs. All of these attempts have met with some success, and the reorientation in recent years has met with great approval in the research community. But the fact remains that we are unable to report that Saskatchewan's research performance and status are increasing in relative terms given contemporary trends, realities, and activities in neighbouring provinces.

Virtually every province in Canada has had to face the issue of health research funding given an increasingly underfunded federal and national sector. Two examples illustrate successful approaches adopted elsewhere. The Alberta Heritage Fund for Medical Research (AHFMR) now spends $43 million annually to improve biomedical research in that province. The result has been the rapid ascent to world class excellence in a number of key fields. Alberta has recognized that funding of this order is essential both to enable the conduct of highly technical scientific enterprises, and to attract the very best scientists. AHFMR funding enables the construction of badly needed research space, the purchase of sophisticated and expensive equipment, and most importantly, the building of full-time research teams capable of a unified, interdisciplinary approach to monumental problems.

The Fonds de la Recherche en Santé du Québec (FRSQ) provide direct and indirect research funding to provincial investigators and research institutes totalling $30 million per year. The FRSQ in 1985-86 provided $16.7 million to 23 research centres and institutes in support of ongoing programs, of which $6.8 million was for infrastructure (i.e., overhead) support. The FRSQ has over the years calculated the "return on investment" by calculating the ratio of external funding to FRSQ funding in these organizations. In 1977-78, the centres and institutes attracted $1.50 for every dollar of FRSQ funding. By 1985-86 the "payoff" had grown to $5.70 in outside funding for each FRSQ dollar. Clearly, the provincial investment has yielded enormous returns in economic terms alone, aside from the massive improvement in level and quality of scientific activity.

Unfortunately we are unable to report that Saskatchewan has done so well over the past decade. Indeed, our relative position in Canada is if anything declining. We have made, doubtless partly attributable to Board activities, some small gains in overall funding levels. Other provinces have made significant gains, and the gap between them and us

widens yearly. Not only do other provinces have far better developed infrastructures and overall funding levels, but also, Saskatchewan has to compete for personnel and resources with Alberta in particular, and other provinces in superior positions as well.

Three conclusions inevitably follow from existing realities. The first is that Saskatchewan has a seriously underdeveloped health research environment. An analogy might be that the province is a "lesser developed nation" compared to others in Canada. Second, shortfalls in the budgets of major federal and national voluntary agencies suggest that they will have to concentrate their resources on programs already well-developed and successful. Saskatchewan will not likely thrive in these circumstances due to our underdeveloped status. Third, the Board can neither meet its formal mandate as defined in The Health Research Act, nor can it bring about a quantum leap in health research activity and performance, given its current funding level. These are not happy conclusions, but it is our duty both to acknowledge and report them to the Minister, the Legislature, and the research community.

Our intention in these remarks is not in any way to detract from the recognition of the significant achievements of Saskatchewan's health researchers over the years, and the higher quality of research submissions and projects received during the Board's brief history. It is simply that we can no longer afford the luxury of thinking that our health research status is acceptable in any way. If it is the perception of the government that a higher status cannot be achieved, in light of competing priorities and financial circumstances, obviously the status quo will have to suffice. But it serves no useful purpose to pretend that we are not falling further behind, or that the SHRB can move research to a higher plane with expenditures literally 2% of those estimated by our neighbour to the west to be required for first class performance.

The Board will continue to seek creative ways to overcome its limitations, and to attempt to spend its funds as effectively as possible. After seven years, perhaps it is timely to take stock and realize that an organization established with an enormous mandate and very little funding will never meet its formal expectations. The SHRB needs to be reexamined. With $5 to $10 million annually--and this is a very low range indeed--some significant accomplishments may be possible. Otherwise, it may be time to acknowledge that the SHRB exists for certain valuable but limited purposes, and that to expect more is no longer realistic. There must be either an entirely new order of funding magnitude, or a candid admission that there are no current plans to make health research a genuine priority.

During 1986 the Board announced plans to initiate a Strategic and Matching Grants program designed to stimulate Saskatchewan researchers to conceive and execute programs on a larger scale. We have invited groups of investigators to propose significant undertakings, with support to come from a partnership of sponsors. When the Board considers the first group of proposals, it will be in a

position to identify the minimum funding needed to allow some of them to proceed to the implementation stage. This program will create even more pressure on our funding, and when we have concrete plans for the future, we will approach government for increased appropriations. While outside funding is a prerequisite, the Board must be in a position to take the lead in providing both conceptual and financial support.

D. D. Johnson

Dr. D. D. Johnson, Chairman

## 2. LEGISLATIVE AUTHORITY AND MANDATE

The SHRB was established as a corporate body under The Health Research Act, proclaimed September 15, 1979, to administer the Saskatchewan Health Research Fund. The Board was empowered under the Act to "assist and stimulate research in the healing arts and health sciences including:

- the causes, detection, distribution, prevention and management of human illness and disabling conditions;
- health maintenance and health promotion;
- the social, environmental, and biological aspects of the human aging process;
- the utilization of health services."

The Board is to consist of at least six and not more than twelve members appointed by the Lieutenant Governor in Council who are residents of Saskatchewan as follows: two representatives from the health sciences or healing arts in the University of Saskatchewan; one from the University of Regina; one member from the Saskatchewan Department of Advanced Education and Manpower; one member from the Saskatchewan Department of Health; and up to seven others. Both the Chairman and Vice-Chairman are designated by the Lieutenant Governor in Council. Appendix 1 lists the members who served on the Board during 1985-86.

## 3. THE SASKATCHEWAN HEALTH RESEARCH FUND

With the proclamation of the Act, the Saskatchewan Health Research Fund came into being for the purpose of assisting and stimulating research in the healing arts and health sciences. Through 1983-84 the Board was required to accumulate a capital fund of unspent reserves which at its maximum level reached $1,560,000. Since then the Board has been authorized to spend down the capital fund; no new funds were received from the Legislature in 1984-85, and the 1985-86 grant for general operating purposes was $400,000. A special grant of $100,000 was also received during 1985-86 to hold a Gerontology Research Competition. Attached as Appendix 2 are the financial statements which detail the financial transactions of the Board as certified by the Provincial Auditor.

## 4. COMPETITIONS AND AWARD CATEGORIES

The Board awards grants on the basis of an annual general competition, occasionally augmented by special competitions when funding is available. The sixth competition, with a closing date of March 15, 1985, solicited applications in the following categories:

1. Establishment Grants to assist new researchers in becoming established in the province, to a maximum of $27,500 per annum for up to two years, non-renewable.

2. Venture Grants for unusual or innovatiave research ideas which may not fit into the more traditional categories, of up to $10,000 for one year only.

3. Major Equipment Grants of up to $20,000 to provide new or essential replacement items for proven investigators with active research programs and operating grants.

4. Training Fellowships for graduate students pursuing studies in Saskatchewan (with rare exceptions in cases where the program is not provided locally), valued at $10,020 per annum for two years, renewable in some instances for a further two years maximum.

5. Research Fellowships for holders of a doctoral degree who wish to develop their fields of research and equip themselves for independent investigation in institutions in Saskatchewan, valued at $21,900 per year for up to two years, renewable in some circumstances for a third year upon reapplication.

## 5. COMPETITION AND REVIEW PROCESS

The Board uses peer review as the major basis for the granting of awards. Appendices 3A, 3B, and 3C list the membership of the Biomedical, Socio-Health, and Personnel Awards Review Committees respectively during 1985-86. Each committee is chaired by a member of the Board, but all other members are drawn from the research community.

The review committees examine, adjudicate, and rank the applications received, and make recommendations to the Board on the order of funding priorities. Research grant applications are sent to two out-of-province experts for assessment. Personnel awards applications are assessed by the committees only. The Board receives the reports of the review committees and retains final authority to make all appropriations after considering the recommendations of its review committees.

## 6. PROFILE OF THE SIXTH GENERAL COMPETITION (1985-86)

Table 1 summarizes the total number of applications, the numbers recommended for funding by the review committees, and the ultimate funding decisions of the Board.

TABLE 1

SUMMARY OF ELIGIBLE APPLICATIONS
RECEIVED, RECOMMENDED, AND FUNDED
COMPETITION 6 (1985-86)

| | APPL. RECEIVED | | APPL. RECOMMENDED | | APPL. FUNDED | |
|---|---|---|---|---|---|---|
| GRANT CATEGORY | No. | $ Requested | No. | $ Requested | No. | $ Awarded |
| Biomed. Establ. | 10 | $ 437,367 | 9 | $ 386,350 | 7 | $ 292,490 |
| Biomed. Venture | 3[a] | 30,000 | 2 | 20,000 | 1 | 10,000 |
| Biomed. Equip. | 8 | 142,391 | 8 | 132,232 | 5 | 76,988 |
| **BIOMED. SUBTOTALS** | **21** | **$ 609,758** | **19** | **$ 538,582** | **13** | **$ 379,478** |
| Socio-Health Establ. | 1[b] | $ 27,000 | 1 | $ 27,000 | 1 | $ 27,000 |
| Socio-Health Venture | 9[b] | 88,599 | 4 | 38,712 | 4 | 38,712 |
| Socio-Health Equip. | 2[c] | 15,947 | 1 | 4,665 | 1 | 4,665 |
| **SOCIO-HEALTH SUBTOT.** | **12** | **$ 131,546** | **6** | **$ 70,377** | **6** | **$ 70,377** |
| Training Fell. | 36 | $ 721,440 | 25 | $ 501,000 | 10[d] | $ 190,380 |
| Research Fell. | 10 | 394,200 | 8 | 328,500 | 7[e] | $ 262,800 |
| **PERSONNEL SUBTOTALS** | **46** | **$ 1,115,640** | **33** | **$ 829,500** | **17** | **$ 453,180** |
| **GRAND TOTALS** | **79** | **$ 1,856,944** | **58** | **$ 1,438,459** | **37** | **$ 903,035** |

[a] excludes 4 applications ruled ineligible as Venture Grants by the review committee

[b] one application for an Establishment Grant was considered as a Venture Grant for purposes of adjudication by the review committee; for purposes of this table that application is considered as a Venture Grant and the amount applied for reduced to the maximum $10,000

[c] one applicant requested a Venture Grant and Equipment; these are counted separately in the table

[d] includes one person funded for one year only

[e] consists of 5 funded for two years and 2 funded for one year

In addition to the awards granted in the general competition, the Board received and approved two requests for Conference and Meeting Grants: an International Symposium in Health and Safety in Agriculture ($5,000), and the Western Canadian Clinical Psychology Conference ($1,500).

It is essential to point out that the number of applications received and the dollar amounts requested are in no way a reflection of the demand for health research dollars in Saskatchewan. This is so for several reasons. First, the Board has severely limited eligibility for grants in recognition of its own financial circumstances. For example, only "new" biomedical researchers are eligible for research grants; over 80% of the province's biomedical investigators are rendered ineligible on this account. Second, the Board no longer provides support for graduate students, again due to lack of funds. Fifty applications could be expected from this sector alone should the Board reinstate the program. Third, applicants are not permitted to apply for more than $30,000 annually over two years (total $60,000). This maximum amount is well below the average grant from the MRC and NHRDP, to name but two major national agencies. Fourth, the Board does not solicit group or team grant applications, which can individually require over a million dollars annually over several years. The largest MRC Group Grant for one year alone exceeds the entire SHRB budget by a factor of two.

While it is impossible to state exactly the number and dollar amount of applications the Board would receive with an unrestricted competition, suffice it to say that the number would, conservatively, quadruple, and the dollar amount would rise to on the order of $10 million--perhaps more if group and major development grants were incorporated. The data reported above represent but a small portion of the "real" need for health research dollars.

The grants and awards made during the 1986 competition are listed in Appendix 4.

## 7. GERONTOLOGY RESEARCH COMPETITION

During the year the Board received a special grant of $100,000 to support gerontology research in Saskatchewan. Accordingly the Board sponsored a special Gerontology Research Competition. In order to determine the level of interest in the province and to encourage initial inquiries, the Board, through its Gerontology Research Committee, established a two-stage application process. First, applicants were invited to submit a Preliminary Letter of Intent outlining the general area of interest. From this group of letters the Board selected those from which detailed applications would be sought.

The process proved to be very useful to both the Board and the applicants. Eventually four grants were awarded, totalling $86,400. Also innovative was the cooperation between the Board and the National Health Research and Development Program (NHRDP), which is the

federal agency funding research consistent with the priorities of Health and Welfare Canada. NHRDP expressed an interest in several applications falling somewhat outside the purview of the Board's competition, and others were simultaneously assessed by both agencies. In general the Board was encouraged by this collaboration, and intends to pursue joint activities wherever feasible. It is also worth noting that NHRDP has adopted the Board's two-stage competition format for some of its own activities based on the success of the Gerontology competition.

The awards made through the program are listed in Appendix 5. Remaining funds will be used for gerontology research. One proposed initiative is a large scale Gerontology Research Conference, tentatively slated for 1988. Such a conference would stimulate the Saskatchewan research community, and part of the theme would be to address the relationship between research and policy-making so vital to the improvement of health services and organization.

## 8. LOW-LEVEL RADIATION FUND

Previous Annual Reports have detailed the activities of the low-level radiation research program, established initially in 1980. The program has been under review since 1982; the Board has received no definitive direction (and no new money) for the program, and has in recent years considered it to be dormant. Occasionally the Board will entertain an unsolicited proposal for funding, particularly if outside sponsorship has been or is likely to be achieved. During 1985-86 no grants were made under the program and there were no changes in the administration or other activities of the fund.

APPENDIX 1

SASKATCHEWAN HEALTH RESEARCH BOARD
APRIL 1, 1985 THROUGH MARCH 31, 1986

JOHNSON, Dr. Dennis (Chairman)
Dept. of Pharmacology
College of Medicine
University of Saskatchewan
SASKATOON, Saskatchewan

HORLICK, Dr. Lou (Vice-Chairman)
Department of Medicine
College of Medicine
University of Saskatchewan
SASKATOON, Saskatchewan

BALA, Dr. Marvin
Department of Medicine
College of Medicine
University of Saskatchewan
SASKATOON, Saskatchewan
(effective May 2, 1985)

BOAN, Dr. John
Department of Economics
University of Regina
REGINA, Saskatchewan

EIDINGER, Dr. David
Department of Microbiology
College of Medicine
University of Saskatchewan
SASKATOON, Saskatchewan
(until May 2, 1985)

HERD, Ms. Agnes
Department of Advanced
Education and Manpower
Government of Saskatchewan
REGINA, Saskatchewan
(until May 2, 1985)

HICKIE, Dr. Robert
Department of Pharmacology
College of Medicine
University of Saskatchewan
SASKATOON, Saskatchewan

HINDMARSH, Dr. Wayne
College of Pharmacy
University of Saskatchewan
SASKATOON, Saskatchewan
(effective May 2, 1985)

MATTHEWS, Dr. Peter
Department of Psychiatry
College of Medicine
University of Saskatchewan
SASKATOON, Saskatchewan

McKENDRY, Dr. John
Department of Advanced
Education and Manpower
Government of Saskatchewan
REGINA, Saskatchewan
(effective May 2, 1985)

PHILIPPON, Dr. Don
Department of Health
Government of Saskatchewan
REGINA, Saskatchewan
(until February 13, 1986)

RIDLEY, Dean Una
College of Nursing
University of Saskatchewan
SASKATOON, Saskatchewan

ROBERTSON, Dr. Bev
Department of Physics
and Astronomy
University of Regina
REGINA, Saskatchewan

WOLSTENHOLME, Mr. James
Department of Health
Government of Saskatchewan
REGINA, Saskatchewan
(effective February 13, 1986)

APPENDIX 2

FINANCIAL STATEMENTS

AND

THE AUDITOR'S REPORT THEREON

# SASKATCHEWAN HEALTH RESEARCH BOARD

## FINANCIAL STATEMENTS

## Year Ended March 31, 1986

OFFICE OF THE PROVINCIAL AUDITOR

REGINA, SASKATCHEWAN

## AUDITOR'S REPORT

To the Members of the Legislative Assembly
Province of Saskatchewan

I have examined the balance sheet of the Saskatchewan Health Research Board as at March 31, 1986 and the statements of revenue, expenditure and fund balance and changes in financial position for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these financial statements present fairly the financial position of the Board as at March 31, 1986 and the results of its operations and the changes in its financial position for the year then ended in accordance with the disclosed basis of accounting applied on a basis consistent with that of the preceding year.

W. G. Lutz

Regina, Saskatchewan,
July 24, 1986.

W. G. Lutz, F.C.A.,
Provincial Auditor.

Statement 1

## SASKATCHEWAN HEALTH RESEARCH BOARD

## BALANCE SHEET

## As at March 31

| | 1986 | | | | 1985 |
|---|---|---|---|---|---|
| | General Fund | Radiation Fund | Gerontology Fund | Total | Total |
| **ASSETS** | | | | | |
| Cash | $ 13,246 | $ 3,277 | $ - | $ 16,523 | $ 12,747 |
| Accrued interest receivable | 5,798 | 3,666 | - | 9,464 | 71,062 |
| Inter-fund receivable (payable) | (96,360) | (2,029) | 98,389 | - | - |
| Investments, at cost which approximates market value | 1,077,889 | 398,955 | - | 1,476,844 | 1,825,435 |
| Fixed assets | 18,102 | - | - | 18,102 | 15,687 |
| Other assets | 1,146 | - | - | 1,146 | 1,098 |
| | $1,019,821 | $403,869 | $98,389 | $1,522,079 | $1,926,029 |
| **LIABILITIES AND EQUITY** | | | | | |
| Liabilities: | | | | | |
| Grants payable | $ 531,867 | $ 3,981 | $86,400 | $ 622,248 | $ 673,098 |
| Equity: | | | | | |
| Equity in fixed assets | 18,102 | - | - | 18,102 | 15,687 |
| Fund balance (Statement 2) | 469,852 | 399,888 | 11,989 | 881,729 | 1,237,244 |
| | 487,954 | 399,888 | 11,989 | 899,831 | 1,252,931 |
| | $1,019,821 | $403,869 | $98,389 | $1,522,079 | $1,926,029 |

(See accompanying notes to the financial statements)

Statement 2

## SASKATCHEWAN HEALTH RESEARCH BOARD

## STATEMENT OF REVENUE, EXPENDITURE AND FUND BALANCE

### Year Ended March 31

| | 1986 | | | | 1985 |
|---|---|---|---|---|---|
| | General Fund | Radiation Fund | Gerontology Fund | Total | Total |
| **Revenue:** | | | | | |
| Grant-Department of Health | $ 400,000 | $ - | $100,000 | $ 500,000 | $ - |
| Interest | 145,990 | 39,213 | - | 185,203 | 276,874 |
| Other | - | - | - | - | 50 |
| | 545,990 | 39,213 | 100,000 | 685,203 | 276,924 |
| **Expenditure:** | | | | | |
| Research grants | 854,300 | (16) | 86,400 | 940,684 | 826,065 |
| Wages and benefits | 64,434 | - | - | 64,434 | 64,070 |
| Administrative and operating expenses | 7,809 | 342 | 175 | 8,326 | 9,369 |
| Honoraria and expenses of the board and committees | 12,332 | - | 1,436 | 13,768 | 15,879 |
| Furniture and fixtures | 2,415 | - | - | 2,415 | - |
| Rent | 11,091 | - | - | 11,091 | 11,384 |
| Administration fee (Note 4) | (4,789) | 4,789 | - | - | - |
| | 947,592 | 5,115 | 88,011 | 1,040,718 | 926,767 |
| Excess of revenue over expenditure | (401,602) | 34,098 | 11,989 | (355,515) | (649,843) |
| Fund balance, beginning of year | 871,454 | 365,790 | - | 1,237,244 | 1,887,087 |
| Fund balance, end of year - to Statement 1 | $ 469,852 | $399,888 | $11,989 | $ 881,729 | $1,237,244 |

(See accompanying notes to the financial statements)

Statement 3

## SASKATCHEWAN HEALTH RESEARCH BOARD

## STATEMENT OF CHANGES IN FINANCIAL POSITION

### Year Ended March 31

| | 1986 | | | | 1985 |
|---|---|---|---|---|---|
| | General Fund | Radiation Fund | Gerontology Fund | Total | Total |
| Cash provided by (used in): | | | | | |
| Operating Activities: | | | | | |
| Grant receipts | $ 400,000 | $ - | $100,000 | $ 500,000 | $ - |
| Interest and other receipts | 203,295 | 43,507 | - | 246,802 | 273,701 |
| Grants paid | (963,116) | (28,418) | - | (991,534) | (1,038,776) |
| Other disbursements | (93,341) | (5,131) | (1,611) | (100,083) | (100,717) |
| Decrease(increase) in inter-fund receivable | 143,733 | (45,344) | (98,389) | - | - |
| | (309,429) | (35,386) | - | (344,815) | (865,792) |
| Investment Activities: | | | | | |
| Proceeds from matured investments | 6,129,427 | 1,936,971 | - | 8,066,398 | 4,516,527 |
| Purchase of Investments | (5,811,956) | (1,905,851) | - | (7,717,807) | (3,754,046) |
| | 317,471 | 31,120 | - | 348,591 | 762,481 |
| Increase(decrease) in cash during the year | 8,042 | (4,266) | - | 3,776 | (103,311) |
| Cash balance, beginning of year | 5,204 | 7,543 | - | 12,747 | 116,058 |
| Cash balance, end of of year | $ 13,246 | $ 3,277 | $ - | $ 16,523 | $ 12,747 |

(See accompanying notes to the financial statements)

SASKATCHEWAN HEALTH RESEARCH BOARD

NOTES TO THE FINANCIAL STATEMENTS

March 31, 1986

1. Authority

The Saskatchewan Health Research Board was established under the provisions of The Health Research Act for the purpose of assisting and stimulating research in the healing arts and health sciences. Pursuant to proclamation of the Act, the Board came into being on September 15, 1979. During 1981 the Board was awarded status as a registered charity under The Income Tax Act.

Under The Health Research Act, the Saskatchewan Health Research Fund was also established, through which all transactions of the Board are conducted. This Fund is comprised of three components, two of which were created to separately account for the revenues and expenditures pertaining to specific programs, as identified below.

The Radiation Fund was established in the 1981 fiscal year pursuant to an agreement entered into between the Department of Health and the Saskatchewan Health Research Board under which the Board agreed to administer and allocate monies received from the Department. The agreement also provides that the use of these funds be restricted to radiation research and costs incurred in administering and allocating the funds. In 1986, the Gerontology Fund was established under similar conditions.

2. Accounting Policies

(a) Fund Accounting

The Saskatchewan Health Research Board follows fund accounting procedures in which a self-balancing group of accounts is provided for each Fund.

(b) Research Grants

The Saskatchewan Health Research Board holds annual competitions through which funds are awarded to successful applicants for terms of up to two years. The Board follows the policy of recording the grant awards approved and committed during the year as expenditures. At year end, awards which have not been paid to individuals or to institutions administering awards on behalf of researchers but which are still committed for a competition are shown as grants payable on the balance sheet. The balance of funds advanced to administering

institutions in excess of the current requirements of researchers is held in trust by those institutions until drawn down by the researchers. In the event of the completion or termination of a project, or non-compliance with the terms of an award, the balance of unexpended funds is treated as a reduction of grant expenditure in the year that this is determined. These funds are then available to be awarded for future research.

(c) Fixed Assets

Fixed asset purchases are charged as an expense against operations in the year of purchase and are therefore not depreciated. All fixed asset additions charged to expense are reflected in the statement of revenue, expenditure and fund balance. To reflect accountability for fixed assets in the financial statements, it is necessary to record them as balance sheet assets with a corresponding entry to "Equity in Fixed Assets".

(d) Investments

Investments are recorded at cost.

3. Cash and Investments

In accordance with a request of the Department of Health, the Board agreed to retain portions of Provincial grants provided in previous years to the General Fund as invested capital. During 1984/85, the Department authorized the Board to begin drawing down on these accumulated funds to support current expenditures for research and administration. Accordingly, the Board considers that, of the cash and investments balance at March 31, 1986, $469,852 was being retained as invested capital of the General Fund (March 31, 1985 - $871,454).

| | Retained (Drawn Down) |
|---|---|
| 1979/80 | $500,000 |
| 1980/81 | 500,000 |
| 1981/82 | 250,000 |
| 1982/83 | 175,000 |
| 1983/84 | 135,000 |
| 1984/85 | (688,546) |
| 1985/86 | (401,602) |
| | $469,852 |

4. Administration Costs

By resolution of the Board in 1983, the Radiation Fund is charged with an annual fee of 5% of the administrative costs of the General Fund (exclusive of direct costs associated with General Fund research competitions), plus the percentage of these costs calculated by determining the proportion of total grant expenditures in the current year (both Funds) accounted for by the Radiation Fund. The amount of the inter-fund charge is reflected as an administration fee in the financial statements.

5. Gerontology Fund

Unused monies of the Gerontology Fund are held in the General Fund without interest. Due to the small number of awards made from this Fund, the Board determined that a charge for general administrative expenses was not necessary.

6. Commitments

As at March 31, 1986, the Board was committed to a lease agreement for office premises with payments in future years as follows:

1987 - $10,534
1988 - $3,511

APPENDIX 3A

SASKATCHEWAN HEALTH RESEARCH BOARD
BIOMEDICAL REVIEW COMMITTEE
COMPETITION 6 (1985)

HORLICK, Dr. L. (Chairman) (6)
Department of Medicine
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

ALBRITTON, Dr. W. (1)
Department of Microbiology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

COTTON, Dr. D. (2)
Department of Medicine
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

HUBBARD, Dr. J. (2)
College of Pharmacy
University of Saskatchewan
Saskatoon, Saskatchewan

JUURLINK, Dr. B. (3)
Department of Anatomy
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

KELLN, Dr. R. (1)
Department of Chemistry
University of Regina
Regina, Saskatchewan

KHANDELWAL, Dr. R. (2)
Department of Biochemistry
College of Medicine
University of Saskatchewan
Saskatchewan

McDUFFIE, Dr. N. (2)
Department of Physiology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

McNEILL, Dr. J. R. (3)
Department of Pharmacology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

MISRA, Dr. V. (1)
Dept. of Vet. Microbiology
Western College of Veterinary Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

SINGER, Dr. D. (1)
College of Dentistry
University of Saskatchewan
Saskatoon, Saskatchewan

SKINNIDER, Dr. L. (2)
Department of Pathology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

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Figure in parenthesis indicates consecutive no. of years served, including the current competition.

APPENDIX 3B

SASKATCHEWAN HEALTH RESEARCH BOARD
SOCIO-HEALTH REVIEW COMMITTEE
COMPETITION 6 (1985)

MATTHEWS, Dr. P. (Chairman) (3)
Dept. of Psychiatry
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

ALEXANDER, Dr. J. (1)
Dept. of Economics
University of Regina
Regina, Saskatchewan

FRITZ, Mr. W. (2)
Policy Research & Management Services Branch
Saskatchewan Health
Regina, Saskatchewan

GRANT, Dr. P. (1)
Dept. of Psychology
University of Saskatchewan
Saskatoon, Saskatchewan

JENNETT, Dr. P. (1)
Continuing Medical Education
University of Saskatchewan
Saskatoon, Saskatchewan

KEEGAN, Dr. D. (2)
Dept. of Psychiatry
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

KNOWLES BRIAN, Ms. J. (1)
Regina Plains Community College
Regina, Saskatchewan

NEUFELD, Ms. A. (1)
College of Nursing
University of Saskatchewan
Saskatoon, Saskatchewan

STANGE, Dr. K. (2)
Faculty of Social Work
University of Regina
Regina, Saskatchewan

TAN, Dr. L. (1)
Dept. of Social and Preventive Medicine
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

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Figure in parentheses indicates consecutive no. of years served, including the current competition.

APPENDIX 3C

SASKATCHEWAN HEALTH RESEARCH BOARD
PERSONNEL AWARDS REVIEW COMMITTEE
COMPETITION 6 (1985)

HICKIE, Dr. R. (Chairman) (1)
Dept. of Pharmacology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

DELBAERE, Dr. L. (1)
Dept. of Biochemistry
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

DYCK, Dr. R. (3)
Dept. of Medicine
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

GENEST, Dr. M. (2)
Dept. of Psychology
University of Saskatchewan
Saskatoon, Saskatchewan

MASLANY, Dr. George (2)
Faculty of Social Work
University of Regina
Regina, Saskatchewan

MIRWALD, Dr. R. (2)
College of Physical Education
University of Saskatchewan
Saskatoon, Saskatchewan

MUIR, Dr. W. (1)
Dept. of Psychology
University of Regina
Regina, Saskatchewan

MURPHY, Dr. B. (2)
Dept. of Biology
University of Saskatchewan
Saskatoon, Saskatchewan

RICHARDSON, Dr. S.
Dept. of Pharmacology (1)
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

SHEPEL, Dr. L. (1)
Dept. of Psychology
University of Saskatchewan
Saskatoon, Saskatchewan

STEWART, Dr. N. (3)
College of Nursing
University of Saskatchewan
Saskatoon, Saskatchewan

THORNHILL, Dr. J. (3)
Dept. of Physiology
College of Medicine
University of Saskatchewan
Saskatoon, Saskatchewan

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Figure in parentheses indicates consecutive no. of years served, including the current competition.

SASKATCHEWAN HEALTH RESEARCH BOARD
AWARDS GRANTED
1985-86, 1986-87

TRAINING FELLOWSHIPS

| Recipient | Supervisor | Department | Amount |
|---|---|---|---|
| CLAIR, David | GENEST, M. | Psychology<br>U of S | $ 10,020-85-86<br>10,020-86-87 |
| FRAIN, Jennifer | GENEST, M. | Psychology<br>U of S | 10,020-85-86<br>10,020-86-87 |
| HEWITT, Paul | GENEST, M. | Psychology<br>U of S | 10,020-85-86<br>10,020-86-87 |
| MacKAY, Janice | SULAKHE, P. | Physiology, U of S | 10,020-86-87 |
| MACKAY, Marilynn | LEONG, C. | Education<br>U of S | 10,020-85-86<br>10,020-86-87 |
| OGLOFF, James | WONG, S. | Psychology<br>U of S | 10,020-85-86<br>10,020-86-87 |
| PERI, Krishna | WAYGOOD, B. | Biochemistry<br>U of S | 10,020-85-86<br>10,020-86-87 |
| RUBY, Lynda | GRANT, P. | Psychology<br>U of S | 10,020-85-86<br>10,020-86-87 |
| SAWCHYN, Agnes | WOLLERT, R. | Psychology<br>U of S | 10,020-85-86<br>10,020-86-87 |
| SETHI, Manjeet | TABEL, H. | Veterinary<br>Microbiology<br>U of S | 10,020-85-86<br>10,020-86-87 |

RESEARCH FELLOWSHIPS

| Recipient | Supervisor | Department | Amount |
|---|---|---|---|
| BHANOT, Pradeep | WAYGOOD, E. Bruce | Biochemistry<br>U of S | 21,900-85-86<br>21,900-86-87 |
| DASGUPTA, Juthika | BERTRAND, H. | Biology<br>U of R | 21,900-85-86<br>21,900-86-87 |
| FLETCHER, Paul | BOULTON, A. | Psychiatric Research Division<br>Saskatchewan Health | 21,900-85-86<br>21,900-86-87 |
| GOPALAKRISHNAN, Venkat | McNEILL, R. | Pharmacology<br>U of S | 21,900-85-86<br>21,900-86-87 |

RESEARCH FELLOWSHIPS (Continued)

| Recipient | Supervisor | Department | Amount |
|---|---|---|---|
| GREENSHAW, Andrew | BOULTON, A. | Psychiatric Research Division Saskatchewan Health | 21,900-85-86 |
| ORIKASA, Shuzo | BOULTON, A. | Psychiatric Research Division Saskatchewan Health | 21,900-85-86 |
| SLOLEY, Brian | BOULTON, A. | Psychiatric Research Division Saskatchewan Health | 21,900-85-86<br>21,900-86-87 |

ESTABLISHMENT GRANTS (BIOMEDICAL)

| | |
|---|---|
| ADACHI, Kazuo - Studies on the structure of the genes encoding for calcium-binding proteins | 27,500/85-86<br>27,500/86-87 |
| CONLY, John - The evaluation of catheter dressing materials and catheter-related infections in patients with long-term central venous lines | 27,500/85-86<br>27,500/86-87 |
| EVERED, Mark - Opiates in thirst and fluid balance | 27,500/85-86<br>27,500/86-87 |
| GANDER, Robert - Myoelectric signal acquisition and analysis | 5,340/85-86<br>1,650/86-87 |
| JOHNSTON, Geoffrey - Study of microsurgical free growth plate transfers using the periosteal circulation with and without the endosteal blood supply | 23,000/85-86 |
| MAYERS, Irvin - High frequency ventilation in canine bronchopleural fistula | 27,250/85-86<br>15,250/86-87 |
| McKAY, Gordon - Development of drug-specific monoclonal antibodies | 27,500/85-86<br>27,500/86-87 |

EQUIPMENT GRANTS (BIOMEDICAL)

| | |
|---|---|
| DESAUTELS, Michel | 15,696/85-86 |
| HERMAN, Robert | 20,000/85-86 |
| McNEILL, James | 15,092/85-86 |
| WALZ, Wolfgang | 12,200/85-86 |
| YU, Peter | 14,000/85-86 |

VENTURE GRANTS (BIOMEDICAL)

| | |
|---|---|
| JOHNSON, Dennis - Tissue culture study of human dystrophic muscle | $10,000-85/86 |

ESTABLISHMENT GRANTS (SOCIO-HEALTH)

| | |
|---|---|
| STEWART, Norma - Sundown syndrome in institutionalized dementia residents | 27,000-85/86 |

EQUIPMENT GRANTS (SOCIO-HEALTH)

| | |
|---|---|
| ZEMORE, Robert | 4,665-85/86 |

VENTURE GRANTS (SOCIO-HEALTH)

| | |
|---|---|
| DASTMALCHIAN, Ali - A study of industrial relations climate in hospitals | 10,000-85/86 |
| FARTHING, Gerald - Socio-demographic analysis of young people with clinical problems | 10,000-85/86 |
| LINWOOD, Marjorie - A child and youth accident assessment tool: pilot study | 8,712-85/86 |
| STARK-ADAMEC, Cannie - Psychiatric nursing: education/training attrition and employment retention | 10,000-85/86 |

CONFERENCE GRANTS

| | |
|---|---|
| International Symposium on Health and Safety in Agriculture | 5,000 |
| Western Canadian Clinical Psychology Conference | 1,500 |

## APPENDIX 5

### SASKATCHEWAN HEALTH RESEARCH BOARD
### GERONTOLOGY RESEARCH GRANTS
### FEBRUARY 1986

| RECIPIENT | PROJECT TITLE | AMOUNT |
|---|---|---|
| BROWNE, N. | Development of music material for withdrawn, confused and disoriented elderly adults | $ 5,000<br>1986-87 |
| D'ARCY, C. | Aging and mental health: managing a successful transition<br>Phase I - baseline data | $ 36,000<br>1986-87<br>$ 19,000<br>1987-88 |
| McCLEMENTS, J. | Relationship of quality of recreation program to leisure time satisfaction and quality of life | $ 9,000<br>1986-87 |
| REMILLARD, A. | The risk of anticholinergic toxicity in the elderly | $ 17,400<br>1986-87 |